

ABSTRACT

Semiconductor devices and methods for manufacturing the same in which deterioration of electrical characteristics are suppressed are described. One method for manufacturing a semiconductor device includes the steps of: forming a gate dielectric layer 20 and a silicon layer 32 on a semiconductor layer 10; forming sidewall insulation layer 62 at the sides of the silicon layer 32; forming a planarized first insulation layer 50; removing the silicon layer 32 in a manner that the gate dielectric layer 20 is not exposed, to thereby form a recessed section 80; partially filling a metal layer 34 in the recessed section 80; forming a second insulation layer 60 in a recessed section 82; etching the first insulation layer 50 to form a through hole 90a; and forming a contact layer 92a in the through hole 90a. The second insulation layer 60 and the sidewall insulation layer 62 are formed from a material different from that of the first insulation layer 50.

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